

What is claimed is:

1. A method of modulating phosphate homeostasis in a subject comprising altering the activity of a polypeptide encoded by the FRP-4 gene within the subject.
- 5 2. The method of claim 1, wherein phosphate homeostasis is modulate by delivering to the subject an effective amount of an agent that alters the activity of a polypeptide encoded by the FRP-4 gene.
3. A method of modulating phosphate homeostasis in a subject comprising altering the expression of a polynucleotide encoding FRP-4 polypeptide within the subject.
- 10 4. A method for modulating renal phosphate transport in a subject, comprising delivering to the subject an effective amount of an agent that alters the activity of a polypeptide encoded by the FRP-4 gene.
5. A method of reducing phosphate re-absorption in a subject comprising delivering to the subject an effective amount of the FRP-4 protein.
- 15 6. A method of reducing phosphate re-absorption in a subject comprising delivering to the subject an effective amount of a polynucleotide encoding the FRP-4 protein.
7. A method of screening for candidate therapeutic agents that modulate the expression of the FRP-4 gene comprising contacting a target cell with a test agent and monitoring expression of the FRP-4 gene, wherein a test agent which modifies the expression of the FRP-4 gene is a candidate therapeutic agent.
- 20 8. The method of claim 7, wherein the candidate agent is a biological or chemical compound selected from the group consisting a polypeptide, a polynucleotide, a ribozyme, and a small organic molecule.
9. A method of screening for candidate agents capable of altering the biological activity of a polypeptide encoded by the FRP-4 gene, comprising contacting a target
- 25

cell expressing a FRP-4 polypeptide with a test agent and monitoring activity of the expressed polypeptide product, wherein a test agent which modifies the activity of the polypeptide is a candidate agent.

10. The method of claim 9, wherein the candidate agent is a biological or chemical compound selected from the group consisting of a polypeptide, a polynucleotide, a ribozyme, or a small organic molecule.
11. A method of screening for candidate agents that modulate the activity of the FRP-4 protein comprising contacting a target cell with a candidate agent and monitoring the activity of the FRP-4 protein, wherein a candidate agent which modifies the activity of the FRP-4 protein is a candidate therapeutic agent.
12. The method of claim 11, wherein the candidate agent is a biological or chemical compound selected from the group consisting of a polypeptide, a polynucleotide, a ribozyme, or a small organic molecule.
13. A method of screening for candidate ligand that modulate the activity of the FRP-4 protein comprising contacting a target cell with a candidate agent and monitoring the activity of the FRP-4 protein, wherein a candidate agent which modifies the activity of the FRP-4 protein is a candidate ligand.
14. The method of claim 13, wherein the candidate agent is a biological or chemical compound selected from the group consisting of a polypeptide, a polynucleotide, a ribozyme, or a small organic molecule.